


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

 Search: ☐ The ACM Digital Library ☒ The Guide



## THE GUIDE TO COMPUTING LITERATURE

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

 Terms used **irreducible dominate**

 Found **9,648** of **902,478**

Sort results by

[Save results to a Binder](#)
[Try an Advanced Search](#)

Display results

[Search Tips](#)
[Try this search in The Digital Library](#)
☐ Open results in a new window

Results 1 - 20 of 200

 Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

 Relevance scale ☐ ☐ ☐ ☐ ☐

### 1 [Handling irreducible loops: optimized node splitting versus DJ-graphs](#)



Sebastian Unger, Frank Mueller

 July 2002 **ACM Transactions on Programming Languages and Systems (TOPLAS)**,  
Volume 24 Issue 4

Publisher: ACM Press

 Full text available: [pdf\(386.11 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper addresses the question of how to handle irreducible regions during optimization, which has become even more relevant for contemporary processors since recent VLIW-like architectures highly rely on instruction scheduling. The contributions of this paper are twofold. First, a method of optimized node splitting to transform irreducible regions of control flow into reducible regions is formally defined and its correctness is shown. This method is superior to approaches previously published ...

**Keywords:** Code optimization, compilation, control flow graphs, instruction-level parallelism, irreducible flowgraphs, loops, node splitting, reducible flowgraphs

### 2 [Nesting of reducible and irreducible loops](#)



Paul Havlak

 July 1997 **ACM Transactions on Programming Languages and Systems (TOPLAS)**,  
Volume 19 Issue 4

Publisher: ACM Press

 Full text available: [pdf\(180.13 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Recognizing and transforming loops are essential steps in any attempt to improve the running time of a program. Aggressive restructuring techniques have been developed for single-entry (reducible) loops, but restructurings and the dataflow and dependence analysis they rely on often give up in the presence of multientry (irreducible) loops. Thus one irreducible loop can prevent the improvement of all loops in a procedure. This article gives an algorithm to build a loop nesting tree for a procedure ...

**Keywords:** reducible loops, strongly-connected regions

### 3 [Identifying loops using DJ graphs](#)



Vugranam C. Sreedhar, Guang R. Gao, Yong-Fong Lee

 November 1996 **ACM Transactions on Programming Languages and Systems**



Welcome United States Patent and Trademark Office

☐ Search Results

BROWSE

SEARCH

IEEE XPLORE GUIDE

Results for "((irreducible loop)<in>pdfdata)"  
 Your search matched 6 of 1297674 documents.  
 A maximum of 100 results are displayed, 25 to a page, sorted by **Relevance** in **Descending** order.

☒ e-mail

## » Search Options

[View Session History](#)
[New Search](#)

## Modify Search


☐ Check to search only within this results set

 Display Format: ☒ Citation ☐ Citation & Abstract

## » Key

IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

## Select Article Information

- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | <b>1. Matrix Analysis of Oriented Graphs with Irreducible Feedback Loops</b><br>Percus, J.;<br>Circuit Theory, IRE Transactions on<br>Volume 2, Issue 2, Jun 1955 Page(s):117 - 127<br><a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a> (1216 KB) IEEE JNL  |
| <input type="checkbox"/> | <b>2. Transforming business process models: enabling programming at a high</b><br>Zhao, W.; Bryant, B.R.; Cao, F.; Kamal Bhattacharya; Hauser, R.;<br>Services Computing, 2005 IEEE International Conference on<br>Volume 1, 11-15 July 2005 Page(s):173 - 180 vol.1<br>Digital Object Identifier 10.1109/SCC.2005.102<br><a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a> (248 KB) IEEE CNF                                      |
| <input type="checkbox"/> | <b>3. Using hammock graphs to structure programs</b><br>Zhang, F.; D'Hollander, E.H.;<br>Software Engineering, IEEE Transactions on<br>Volume 30, Issue 4, April 2004 Page(s):231 - 245<br>Digital Object Identifier 10.1109/TSE.2004.1274043<br><a href="#">AbstractPlus</a>   <a href="#">References</a>   Full Text: <a href="#">PDF</a> (1838 KB) IEEE JNL   |
| <input type="checkbox"/> | <b>4. An efficient online path profiling framework for Java just-in-time compiler</b><br>Yasue, T.; Suganuma, T.; Komatsu, H.; Nakatani, T.;<br>Parallel Architectures and Compilation Techniques, 2003. PACT 2003. Proceed<br>International Conference on<br>27 Sept.-1 Oct. 2003 Page(s):148 - 158<br>Digital Object Identifier 10.1109/PACT.2003.1238011<br><a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a> (342 KB) IEEE CNF |
| <input type="checkbox"/> | <b>5. Techniques for software thread integration in real-time embedded system</b><br>Dean, A.G.; Shen, J.P.;<br>Real-Time Systems Symposium, 1998. Proceedings., The 19th IEEE<br>2-4 Dec. 1998 Page(s):322 - 333<br>Digital Object Identifier 10.1109/REAL.1998.739760<br><a href="#">AbstractPlus</a>   Full Text: <a href="#">PDF</a> (128 KB) IEEE CNF   |
| <input type="checkbox"/> | <b>6. Hardware to software migration with real-time thread integration</b><br>Dean, A.G.; Shen, J.P.;  |

[Home](#) | [Login](#) | [Logout](#) | [Access Information](#) | [Alerts](#) |

Welcome United States Patent and Trademark Office

[Search Results](#)[BROWSE](#)[SEARCH](#)[IEEE XPLORE GUIDE](#)

Results for "((irreducible dominator)&lt;in&gt;pdfdata)"

[e-mail](#)

Your search matched 0 documents.

A maximum of 100 results are displayed, 25 to a page, sorted by **Relevance** in **Descending** order.

## » Search Options

[View Session History](#)[New Search](#)

## Modify Search

☐ Check to search only within this results setDisplay Format: ☒ Citation ☐ Citation & Abstract

## » Key

IEEE JNL IEEE Journal or Magazine

IEE JNL IEE Journal or Magazine

IEEE CNF IEEE Conference Proceeding

IEE CNF IEE Conference Proceeding

IEEE STD IEEE Standard

**No results were found.**

Please edit your search criteria and try again. Refer to the Help pages if you need assistance search.

[Help](#) [Contact Us](#) [Privacy & :](#) 

© Copyright 2005 IEEE --

Indexed by  
 Inspec